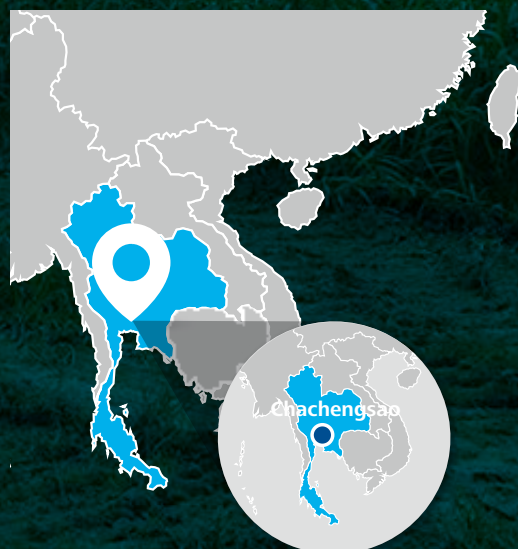


CHOL CHAROEN WASTEWATER TREATMENT THAILAND



**Generating renewable electricity from
wastewater biogas**

The Chol Charoen Wastewater Treatment Project is located at a tapioca starch processing plant in Chachoengsao Province in south-central Thailand. Biogas from wastewater is captured and burned to produce electricity and heat that powers the factory.



Improving Thailand's energy security by providing a local source of clean, renewable energy.

The Chol Charoen factory produces tapioca starch from dried cassava that is grown locally. This process creates vast amounts of wastewater which is stored in a series of 13 lagoons. The large size of these lagoons and the warm temperature creates perfect conditions for the breakdown of organic compounds in the wastewater. This produces large amounts of methane, a powerful greenhouse gas.

At Chol Charoen the existing process has been modified into a closed loop system that captures the methane emissions and uses them to generate heat and electricity.

The project has created 9 new local jobs in the construction and operation phases. The treatment process prevents greenhouse gas emissions, and improves the local air and wastewater quality.


1,700

m³ of water treated/day


2,000

MWh electricity generated per year


9

jobs created


13,109

tCO₂e mitigated per year

PROJECT HIGHLIGHTS

For more information on the UN Sustainable Development Goals please visit: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>